



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,150	04/27/2005	Takayuki Taguchi	10921.315U/SWO	2382
52835 7590 07/08/2008 HAMRE, SCHUMANN, MUELLER & LARSON, P.C. P.O. BOX 2902 MINNEAPOLIS, MN 55402-0902				
EXAMINER MIRABEAU, MONIQUE A				
ART UNIT		PAPER NUMBER		
4112				
MAIL DATE		DELIVERY MODE		
07/08/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/533,150

Applicant(s)

TAGUCHI ET AL.

Examiner

MONIQUE MIRABEAU

Art Unit

4112

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-12 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on April 27, 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/ISD)
Paper No(s)/Mail Date 04/27/2005
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Summary

1. This is the initial Office Action based on the 101/533,150 application filed April, 27/2005.
2. Claims 1-12 are pending and have fully been considered.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: **Figure 1: I and II; Figure 3: Va and Vb; Figure 13A: 9A, 90A, 91A and Figure 13B: 9B, 90B, 91B and 92B**. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. Figures **13A** and **13B** should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Priority

5. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 1- 12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by MIYAKE et al. (US 6, 383, 452).

8. MIYAKE et al. discloses a chemical analyzer and chemical analyzing system. MIYAKE et al. teaches an analyzing cassette (1) (analyzing tool) comprising an introducing portion (11, see figure 3A) (liquid inlet) provided at a main body (2, see figure 2) (central portion) (claim 1); a plurality of flow passages (13) (channels) which communicate with the introduction portion (11) (liquid inlet) for moving a sample liquid introduced through the introduction portion (11) (liquid inlet) by capillarity (capillary action) (col6., lines 50-55) from the main body (2) (central portion) toward outward bounds (see figure 3A) (peripheral portion) of the analyzing cassette (1) (tool).

FIG. 1

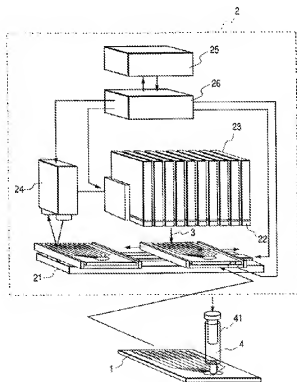
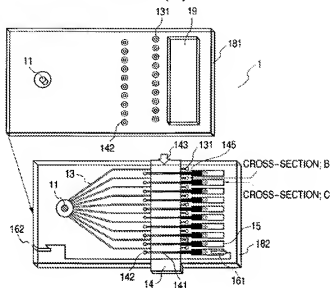


FIG. 3(A)

9. With respect to claim 2, MIYAKE et al. discloses an analyzing cassette (1) (analyzing tool) where each of the flow passages (13) (channels) extend linearly from the main body (2) (central portion) toward the outward bounds (peripheral portion) (figure 3A).

10. With respect to claim 3, MIYAKE et al. discloses analyzing cassette (1) (analyzing tool), the plurality of flow passages (13) (channels) are provided in radial directions (arranged radially) (col. 11, lines 52-53).

11. With respect to claim 4, MIYAKE et al. discloses an analyzing cassette (1) (analyzing tool) where the plurality of flow passages (13) (channels) are grouped into one or a plurality of collective flow passages (13) (channels) having a common part and individual parts, where the collective flow passages (13) (channels) extend from the main body (2) (central portion) while branching towards the outward bounds (peripheral portion) of the analyzing cassette (1) (tool) (fig. 3 (A)).

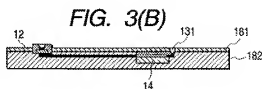
Art Unit: 4128

12. With respect to claim 5, MIYAKE et al. discloses a plurality of measurement portion (measurement sites), each of the flow passages (13) (channels) being provided with at least one of the measurement portion (measurement sites), where the plurality of measurement portion (measurement sites) are arranged on a analyzing cassette (1) (common circle) (col.3, lines 40-44).

13. With respect to claim 6, MIYAKE et al. discloses an analyzing cassette (1) (analyzing tool) which has a disc-like shape (disk configuration) (col. 11, lines 49-50).

14. With respect to claim 7, MIYAKE et al. discloses an analyzing cassette (1) (analyzing tool), where two or more of the plurality of flow passages (13) (channels) have reagent parts for reacting with a sample liquid, and where the reagents parts on the two or more flow passages (channels) contain reagents different from each other (claim 8).

15. With respect to claim 8, MIYAKE et al. discloses an analyzing cassette (1) (analyzing tool) further comprising a substrate (181 and 182) and distribution portion (cover) (col. 6, lines 1-3) joined to the substrate (figure 3 (B)), where the introduction portion (11) liquid inlet comprises a through-hole in the substrate (181 and 182) or the cover (figure 3(A)), and where the plurality of flow passages (16) (channels) comprises grooves in the substrate or the cover (figure 3 (A)).



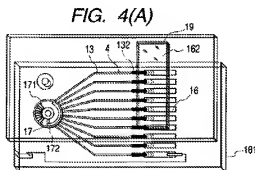
16. With respect to claim 9, MIYAKE et al. discloses an analyzing cassette (1) (analyzing tool) where each of the grooves has a main cross section which is rectangular (fig. 3(A)) with a width of 55 μm (10-500 μm) and a depth of 90 μm (5-500 μm) (col. 5, lines 38-40), the depth/width ratio being ≥ 0.05 .

"[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." See *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). (MPEP 2144.05, part II, section B)

17. With respect to claim 10, MIYAKE et al. discloses an chemical analyzer (analyzing apparatus) for performing analysis of a sample liquid using an main body (2) (analyzing tool), where the main body (2) (analyzing tool) comprises a introducing portion (11, see figure 3A) (liquid inlet) at a main body (2, see figure 2) (central portion), a plurality of flow passages (13) (channels) which communicate with the introduction portion (11) (liquid inlet) for moving a sample liquid introduced through the introduction portion (11) (liquid inlet) by capillarity (capillary action) (col.6., lines 50-55) and allow a sample liquid introduced through the liquid inlet to flow from the central portion toward a peripheral portion of the tool under capillary action (figure 3 (A)), plurality of measurement portion (measurement sites), each of the flow passages (13) (channels) being provided with at least one of the measurement portion (measurement sites), where the

Art Unit: 4128

plurality of measurement portion (measurement sites) are arranged on a analyzing cassette (1) (common circle) (col.3, lines 40-44), and the chemical analyzer (analyzing apparatus) comprises rotary valve (17, see fig. 4(A)) (rotating means) for rotating the main body (2) (analyzing tool) (col. 8, lines 51-55) and detecting (detection means) for providing a stimulus to the measurement portion (measurement sites) and detecting a reaction at the measurement portion (measurement sites) (col. 8, lines 21-24).



18. With respect to claim 11, MIYAKE et al. discloses an chemical analyzer (analyzing apparatus) where the optical detector (24) (detection means) comprises a light (fixed light source) and a optical detector (24) (light detector) for providing the stimulus as light while detecting the reaction as reflected light, transmitted light or scattered light (col. 9, lines 41-49).

19. With respect to claim 12, MIYAKE et al. discloses an chemical analyzer (analyzing apparatus) where the plurality of measurement portion (measurement sites) are positioned at equal intervals from each other (fig. 3(A)), the rotary valve (17) (rotating means) causing the analyzing cassette (1) (analyzing tool) to rotate

Art Unit: 4128

(intermittently at angles corresponding to the intervals) between adjacent measurement portion (measurement sites) (col. 8, lines 21-24).

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The reference KOPF-SILL et al. (US 6, 235, 531) discloses a device and methods for analyzing biological fluids.

The reference WAKATAKE (JP 08105901) discloses an automatic analyzer.

The reference YAMAGATA et al. (US 2004/0121356) discloses a microchip comprising a constituting a reaction system (abstract).

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MONIQUE MIRABEAU whose telephone number is (571) 270-5543. The examiner can normally be reached on M-F, alternate F off (8am-4pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Barbara Gilliam can be reached on (571) 272-1330. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or (571) 272-1000.

MM

/Barbara L. Gilliam/
Supervisory Patent Examiner, Art Unit 4128